

U.S. Climate Change Activities

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Overview

- **U.S. Climate Policy Update**
- **Climate Change Initiatives**
- **Progress in Key Areas**
 - ◆ **Research**
 - ◆ **Technology**
 - ◆ **Voluntary Programs**
- **Conclusions**

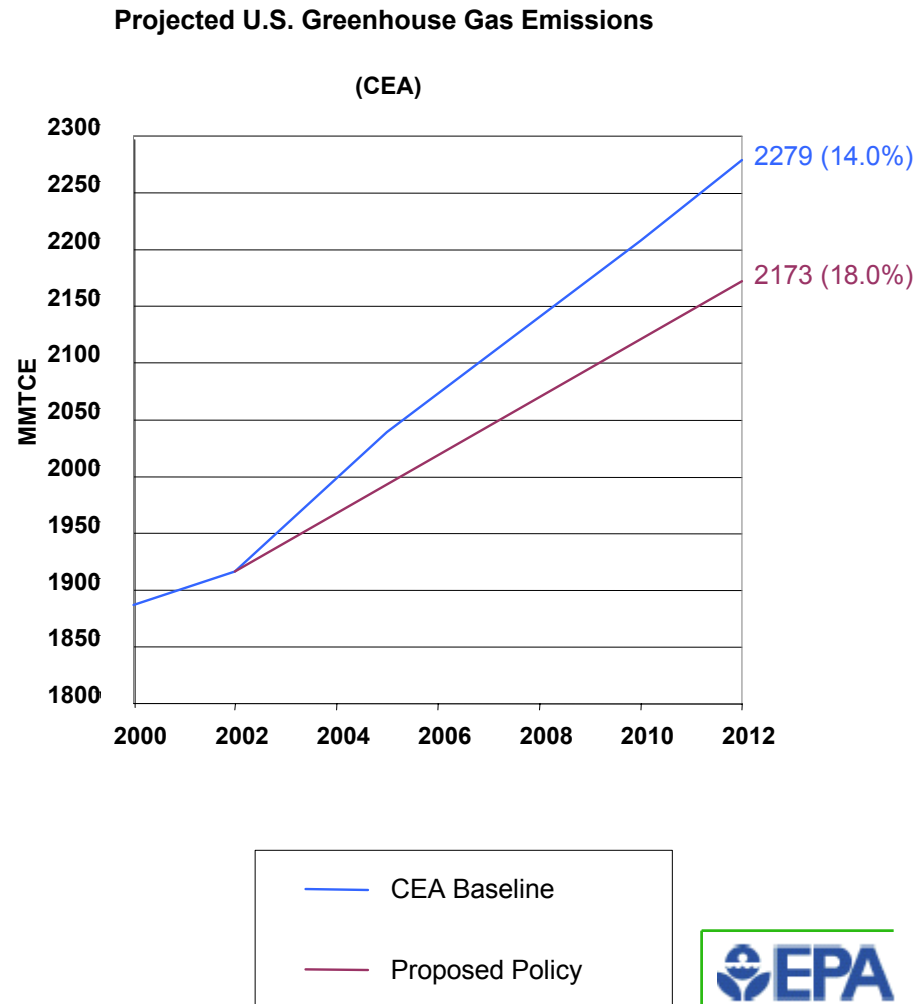
U.S. Climate Policy Update

February 2002 Presidential initiative includes efforts to:

- **Cut GHG intensity by 18% over next 10 years**
 - ◆ **Compares to projected 14% BAU reduction**
- **Improve emissions reduction registry**
 - ◆ **Interagency effort to enhance accuracy, reliability, verifiability of federal (1605b) system**
- **Increase support for science research & technology**
 - ◆ **\$4.5 B for climate programs in President's 2003 budget**
 - ◆ \$1.7 B for science research
 - ◆ \$1.3 B for climate technologies

What an 18% Intensity Cut Means

- **BAU-Baseline is 14% improvement in emissions per GDP over next 10 years**
- **Administration's Goal is to advance to 18% improvement which cuts:**
 - ◆ **100 mmtce in 2012**
 - ◆ **500 mmtce cumulatively**



Making Progress in Key Areas

- **Federal Climate Research**
- **Technology Development**
- **Voluntary Programs**

Federal Climate Research

- **Three broad areas for new research strategy:**
 - ◆ **Scientific inquiry**
 - ◆ **Observations & monitoring systems**
 - ◆ **Decision support tools**
- **Strategic plan for U.S. climate change research to be published in April 2003**
- **Workshop on U.S. Climate Change Science Program December 3-5, 2002, in Washington, DC**

Technology Development

- Reviewing **existing R&D** activities
- Developing approaches to pursue **advanced technologies**
- Identifying creative ways to advance development of **innovative technologies**

Examples of Technology Progress

- **Fuel Cells for transportation**
 - ◆ **FreedomCAR initiative launched**
- **CO2 Capture and Sequestration**
 - ◆ **Support to conservation programs**
 - ◆ **\$25 M initiative to co-fund innovative carbon sequestration projects launched by DOE**
- **Agriculture and Forestry**
 - ◆ **Researching methods to reduce emissions of methane and nitrous oxide from agriculture**

Voluntary Programs

- **Spur investment**
 - ◆ **Focus on cost-effective opportunities**
 - ◆ Where largest environmental benefits can be achieved
 - ◆ **Focus on action**
 - ◆ Provide consumer with information
 - ◆ Reduce transaction costs
- **Employ many underutilized, cost-effective technologies and practices resulting in:**
 - ◆ **Sizeable efficiency gains and GHG reductions by 2010**
 - ◆ **Significant energy bill savings**
 - ◆ **Enhanced economic growth**

Voluntary Programs Get Results

Summary of EPA Program Efforts to Date

Total investments in efficient technologies ➡ ***\$11 Billion***

Net savings for consumers and businesses ➡ ***\$60 Billion***

Total GHG reductions thru 2010 ➡ ***450 MMTCE***

Total peak energy saved ➡ ***10 GW***



- ***\$15 invested***
- ***\$60 net energy savings***
- ***More than 1 ton Carbon avoided***

EPA Voluntary Climate Opportunities

- **Electricity: Clean generation**
 - ◆ Combined heat and power (DOE/EPA)
 - ◆ Green Power Partnership (EPA)
- **Transportation:**
 - ◆ CommuterChoice, It All Adds Up to Cleaner Air
- **Industry: Voluntary Partnerships**
 - ◆ Climate Leaders
 - ◆ Voluntary Sector Partnerships (Aluminum, etc.)
- **Commercial and Residential Buildings**
 - ◆ Energy Star
 - ◆ WasteWise
- **State and Local Climate Change Program**
- **Agriculture and Forestry**
- **Methane and High-GWP Programs**



Energy Star

- **Energy-efficient products and solutions that yield:**
 - ◆ **Cost savings (\$5 billion annually)**
 - ◆ **Greenhouse gas reductions**
 - ◆ **Energy reliability**
 - ◆ **Energy security**

- **Avoided approximately 80 billion kWh in 2001**
 - ◆ **Avoided 15% of growth in energy demand for buildings since 1990**
 - ◆ **750 million Energy Star labeled products purchases**

- **Avoided approximately 10 GW of peak power**
 - ◆ **Avoided need for more than 30 “average” 330MW plants**

Climate Leaders

- Companies work with EPA to evaluate GHGs, set aggressive reduction goals, report progress toward goals
- Gives businesses incentives to invest in new, cleaner technologies and pursue GHG mitigation and sequestration strategies now
- Currently, 30+ partner companies
 - ◆ Represent nearly all of energy-intensive industries
 - ◆ 7 have set specific emissions reduction goals
 - ❖ Miller Brewing Company - reduce 18% per barrel
 - ❖ GM - reduce total emissions by 10%

Clean Energy Programs

- **Green Power Partnership**
 - ◆ **Companies commit to green power**
 - ◆ **500 Million KWh of green power to date**
 - ◆ **Currently 83 partners**
 - ◆ Includes 13 state, county or local governments

- **Combined Heat and Power Partnership**
 - ◆ **Promotes co-generation by industry, state/local governments, and nonprofits**
 - ◆ 17 Fortune 500 companies
 - ◆ 9 state, county or local governments

State & Local Climate Change Program

- Provides targeted technical and policy support
- ID's economically, environmentally efficient reductions
- Evaluates actions and develops lessons learned
- Recognizes leadership and showcases successes
- Integrates states and localities into Administration's climate strategy, 18% intensity reduction goal

Other EPA Climate Activities

- **WasteWise**
- **High-GWP Environmental Stewardship Programs**
- **Methane Programs**
- **Transportation Programs**

Other Agencies' Programs Contribute to Progress on Climate

- **Department of Energy**
- **Department of Transportation**
- **Commerce Department/NOAA**
- **Department of Agriculture**

Voluntary Emissions Registry

- DOE leading inter-agency effort to improve Voluntary GHG Reporting Program(1605B)
 - ◆ Goal is to create comprehensive and transparent program to report and credit real GHG reductions
- Four workshops to collect suggestions on specific improvements
 - ◆ The first took place in DC earlier this week
 - ◆ Other workshops planned for Houston, San Francisco and Chicago
- New reporting guidelines expected by January 2004

Conclusions

- **The U.S. Government is continuing a broad strategy to address climate change, reduce GHG emissions and sustain economic growth through:**
 - ◆ **Research and development**
 - ◆ **Innovative, clean technologies**
 - ◆ **Voluntary programs**

For More Information

- EPA Global Warming website
 - ◆ www.epa.gov/globalwarming
- EPA's voluntary programs information
 - ◆ www.epa.gov/climateleaders/resources.html
- U.S. Department of State climate website
 - ◆ www.state.gov/g/oes/climate